

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

POLAROID CORPORATION,

Plaintiff,

v.

HEWLETT-PACKARD COMPANY,

Defendant.

C. A. No. 06-738 (SLR)

**REDACTED**

**DEFENDANT HEWLETT-PACKARD'S MEMORANDUM  
IN SUPPORT OF MOTION TO PRECLUDE THE REPORT AND  
TESTIMONY OF POLAROID'S SURVEY EXPERT WALTER MCCULLOUGH**

**FISH & RICHARDSON P.C.**

William J. Marsden, Jr. (#2247)  
Raymond N. Scott, Jr. (#4949)  
919 N. Market Street, Suite 1100  
Wilmington, DE 19801  
Tel.: (302) 652-5070  
Fax: (302) 652-0607  
Emails: [marsden@fr.com](mailto:marsden@fr.com)  
[rscott@fr.com](mailto:rscott@fr.com)

John E. Giust (*pro hac vice*)  
Matthew E. Bernstein (*pro hac vice*)  
MINTZ, LEVIN, COHN, FERRIS,  
GLOVSKY AND POPEO, PC  
5355 Mira Sorrento Place, Suite 600  
San Diego, CA 92121-3039  
Tel.: (858) 320-3000  
Fax: (858) 320-3001  
Emails: [JGiust@mintz.com](mailto:JGiust@mintz.com)  
[Mbernstein@mintz.com](mailto:Mbernstein@mintz.com)

Robert S. Frank, Jr. (*pro hac vice*)  
Robert M. Buchanan, Jr. (*pro hac vice*)  
Carlos Perez-Albuerno (*pro hac vice*)  
Elizabeth A. Castellani (*admission pro hac  
vice pending*)  
CHOATE, HALL & STEWART LLP  
Two International Place  
Boston, MA 02109  
Tel.: (617) 248-5000  
Fax: (617) 248-4000  
Emails: [rfrank@choate.com](mailto:rfrank@choate.com);  
[cperez@choate.com](mailto:cperez@choate.com)

Dated: May 23, 2008

*Attorneys for Defendant and Counterclaim-Plaintiff  
Hewlett-Packard Company*

**TABLE OF CONTENTS**

	<b><u>Page</u></b>
SUMMARY OF ARGUMENT .....	1
STATEMENT OF FACTS .....	2
A.    Polaroid’s Theory Of Damages. ....	2
B.    The McCullough Survey. ....	3
C.    HP Retained Dr. Jacob Jacoby to Review The McCullough Survey. ....	6
ARGUMENT .....	7
I.    A SURVEY MUST MEET GENERALLY ACCEPTED STANDARDS OF OBJECTIVE RESEARCH. ....	7
II.   THE McCULLOUGH SURVEY FAILS TO MEET GENERALLY ACCEPTED SURVEY PRINCIPLES. ....	9
A.   The Subject Addressed Is Not Relevant To Polaroid’s Theory Of Damages. ....	9
B.   The McCullough Survey Design Is Inherently Biased And Misleading. ....	11
C.   The McCullough Survey Called for Guesses. ....	15
CONCLUSION. ....	18

**TABLE OF AUTHORITIES****CASES**

<i>Albert v. Warner-Lambert Co.</i> , 234 F. Supp. 2d 101 (D. Mass. 2002) .....	8
<i>American Home Products v. Johnson &amp; Johnson</i> , 654 F. Supp. 568 (S.D.N.Y. 1987) .....	14
<i>AstraZeneca LP v. TAP Pharm. Prods.</i> , 444 F. Supp. 2d 278 (D. Del. 2006) .....	17
<i>Brokerage Concepts v. U.S. Healthcare</i> , 140 F.3d 494 (3d Cir. 1998) .....	7, 15
<i>C.A. May Marine Supply Co. v. Brunswick Corp.</i> , 649 F.2d 1049 (5th Cir. 1981) .....	11
<i>Citizens Financial Group, Inc. v. Citizens Nat. Bank of Evans City</i> , 383 F.3d 110 (3d Cir. 2004) .....	8
<i>Daubert v. Merrell Dow Pharmaceuticals</i> , 509 U.S. 579 (1993) .....	7
<i>Frisch's Restaurant, Inc. v. Elby's Big Boy of Steubenville, Inc.</i> , 661 F. Supp. 971 (S.D. Ohio 1987) .....	6
<i>General Electric v. Joiner</i> , 522 U.S. 136 (1997) .....	7
<i>Hill's Pet Nutrition, Inc. v. Nutro Products, Inc.</i> , 258 F. Supp. 2d 1197 (D. Kan. 2003) .....	15
<i>Home Box Office v. Showtime/The Movie Channel</i> , 665 F. Supp. 1079 (S.D.N.Y. 1987), <i>aff'd in part, vacated in part</i> by 832 F.2d 1311 (2d Cir. 1987) .....	15
<i>Izumi Products Co. v. Koninklijke Philips Electronics N.V.</i> C.A. No. 02-156-SLR (D. Del. Apr. 27, 2004) .....	9
<i>Johnson &amp; Johnson-Merck Consumer Pharm. Co. v. Rhone-Poulenc Rorer Pharms., Inc.</i> , 19 F.3d 125 (3d Cir. 1994) .....	15, 16
<i>Kumho Tire Co. v. Carmichael</i> , 526 U.S. 137 (1999) .....	7

<i>Novartis Consumer Health, Inc. v. Johnson &amp; Johnson-Merck Consumer Pharm. Co.</i> , 290 F.3d 578 (3d Cir. 2002).....	8, 9, 11, 17
<i>Shockley v. Arcan, Inc.</i> , 248 F.3d 1349 (Fed. Cir. 2001).....	7
<i>Starter Corp. v. Converse, Inc.</i> , 170 F.3d 286 (2d Cir. 1999).....	10
<i>Tunnell v. Ford Motor Co.</i> , 330 F. Supp. 2d 707 (W.D. Va. 2004) .....	8, 15

#### STATUTES

35 U.S.C. § 284.....	2
----------------------	---

#### OTHER AUTHORITIES

Federal Rules of Evidence 403 .....	7, 11
Federal Rules of Evidence 702 .....	1, 7, 10
<i>Reference Manual On Scientific Evidence</i> (2d ed. 2000) .....	Passim

Hewlett-Packard Company (“HP”) hereby moves for an order excluding the testimony of Walter McCullough, who conducted a survey on behalf of Polaroid Corporation (“Polaroid”), and to preclude any evidence based on the McCullough survey or on Mr. McCullough’s related expert opinions.<sup>1</sup>

### **SUMMARY OF ARGUMENT**

A. The subject addressed by Mr. McCullough’s survey is not relevant to Polaroid’s theory of damages, and should be precluded. F.R. Evid. 702.

B. Mr. McCullough’s survey fails to comply with generally accepted survey principles.

1. The McCullough survey is overwhelmingly biased. Mr. McCullough purported to ask consumers how they perceived the relative value of the Adaptive Lighting feature offered in HP printers. But Mr. McCullough’s survey focused attention only on this one feature, without directing attention to any of the other attributes of HP’s printers. This improperly biased the respondents’ answers and led them to believe that the feature in question must have a high value relative to other features.

2. Moreover, the McCullough survey did not call for respondents to draw on their own knowledge and experience. Instead it asked them to make guesses, and it induced them to make high guesses rather than low guesses.

For all of these reasons, Mr. McCullough’s survey fails to satisfy the *Daubert* standard and federal evidentiary rules governing the admission of expert opinion evidence.

---

<sup>1</sup> Mr. McCullough’s expert report, dated March 14, 2008, is titled “Report on the Perceived Value of Adaptive Lighting Technology in Hewlett-Packard Printers” (“McCullough Report”). A copy is attached to the Declaration of William J. Marsden, Jr. (“Declaration”) as Exhibit A. HP retained a prominent survey expert, Dr. Jacob Jacoby, to review the McCullough Report. Dr. Jacoby’s Expert Rebuttal Report (“Jacoby Rebuttal Report”) is attached to the Declaration as Exhibit B. All citations in the brief to “Exhibit \_\_\_” refer to the accompanying Declaration unless otherwise noted.

**REDACTED**

**STATEMENT OF FACTS**

Polaroid alleges that HP infringed U.S. Patent No. 4,829,381 (“the ‘381 patent”). The ‘381 patent discloses and claims a system and process for enhancing images by improving contrast on very bright and very dark portions of the image. HP developed software that performs a variety of image management and enhancement features. One such feature is called “Adaptive Lighting”. Polaroid alleges that the algorithm used in Adaptive Lighting infringes certain claims of the 381 patent.

*See* Ranjit Bhaskar Deposition

(“Bhaskar Dep.”) (Exhibit C) at 24-27.

*See* Jacoby Rebuttal Report at 8.

A. Polaroid’s Theory Of Damages.

Polaroid seeks a damage award based upon a reasonable royalty pursuant to 35 U.S.C. § 284. The first HP product that could implement LACE was shipped in 2002. *See* Bhaskar Dep. at 97. Therefore, Polaroid’s damages theory envisions that the parties would have conducted a hypothetical negotiation in late 2001 or 2002.

Polaroid’s expert, Dr. Allyn Strickland,

**REDACTED**

B. The McCullough Survey.

Polaroid retained Mr. McCullough to conduct a survey in 2008. He did not study people who had purchased HP printers since 2002. He did not ask whether consumers use the Adaptive Lighting feature in HP printers. He did not ask whether having the Adaptive Lighting feature causes consumers to print more photos than they would otherwise print. He did not ask whether having the Adaptive Lighting feature causes consumers to purchase more HP ink and photo paper than they would purchase otherwise. Instead, Mr. McCullough professed to study whether consumers perceive that printers are more valuable with the Adaptive Lighting feature than the printers would be without this feature.

Mr. McCullough's Report partially describes a survey that he conducted from January 24 through February 24, 2008 at eight shopping malls. This was the first time McCullough had ever

conducted a consumer valuation survey for litigation purposes. McCullough Deposition ("McCullough Dep.")<sup>2</sup> at 93.

Mr. McCullough's First Survey.

McCullough conducted the first round of his survey during the weekends of January 24 through January 27, and January 31 through February 3, 2008. In this round McCullough's interviewers asked consumers about one HP model printing device (priced at just under \$300) and also asked consumers about cameras. With respect to the printing device, the survey ran as follows.

1. McCullough's interviewers presented consumers with HP's written description of the HP Photosmart C6180 All-in-One (priced at \$299.99). *See* McCullough Report (Exhibit C within the Report). This was a standard fact sheet prepared by HP itself. An All-in-One is a device that is a copier, a fax machine, a scanner and a printer. (Adaptive Lighting is only available for use in connection with the device's printing capability.)

2. Interviewers then read aloud to participants a laudatory description of the Adaptive Lighting feature. This description did not appear in the HP fact sheet and was not reproduced from HP promotional materials. Instead, it was crafted by Mr. McCullough himself. Adaptive Lighting was the only feature described. Participants were not provided with further information on any of the other numerous other attributes of the HP printers.

3. After participants listened to Mr. McCullough's description of the Adaptive Lighting feature, interviewers asked them the main question of the survey. Question 1 asked consumers the following:

If there were a color ink jet printer model that contained all of the features of the printer whose description I just showed you, but it

---

<sup>2</sup> Attached as Exhibit E are excerpts from the deposition of Mr. McCullough.



did not have the Adaptive Lighting Technology feature, do you think that model would cost less than the model with the Adaptive Lighting Technology feature, or would the price be the same as the model with the Adaptive Lighting Technology feature?

McCullough Report at 6.

4. Consumers were then asked Question 2:

About how much less do you think the model without the Adaptive Lighting feature would cost?

*Id.* at 7. Mr. McCullough anticipated that many of the survey respondents would answer

"I don't know." He did not accept that answer, however. Where respondents answered

"don't know" to Question 2, they were handed a card with dollar choices selected by Mr.

McCullough and were asked:

Which of the choices on this card indicates how much less [than its \$300 price] you think the model without the Adaptive Lighting Technology feature would cost? Just tell me the letter of the choice you select.

*Id.*

The consumers who were asked to state a dollar figure about this first All-in-One gave answers ranging from zero to \$250. Their answers averaged \$50, Mr. McCullough tells us.

McCullough Report at 3.<sup>3</sup>

---

<sup>3</sup> At the same time that Mr. McCullough's interviewers were asking these questions about the first All-in-One, Mr. McCullough's interviewers were also asking -- as part of the same initial survey -- a similar series of questions about cameras with the Adaptive Lighting feature. Mr. McCullough wrote the camera questions and received those camera responses, but did not disclose them in his Report. HP learned about the camera questions and responses when it took Mr. McCullough's deposition on May 6, 2008. Polaroid withheld this information from disclosure on the purported ground that it is attorney work product. McCullough Dep. at 14-15, 23-25. After the deposition HP demanded production of the camera questions and responses (Exhibit F), and, after some skirmishing, Polaroid agreed to provide them. The camera materials had not yet arrived at the office of HP's counsel as of the close of business on May 22, 2008, however, and this motion is due to be filed on May 23, 2008. HP has not yet had an opportunity to analyze the camera materials and to examine Mr. McCullough about them. Accordingly, HP requests an opportunity to supplement this motion in the near future.

Mr. McCullough's Second Survey.

Mr. McCullough conducted a second survey round on the weekends of February 14-18 and February 21-24. In the second survey, Mr. McCullough applied the same procedure (as outlined above) to questions about a less expensive HP printing device, the HP Officejet 5610 All-in-One (priced at \$99.99 after rebate). The consumers who were asked to state a dollar figure about the second All-in-One gave answers ranging from zero to \$200 (more than the price of the device itself). Their answers averaged \$20, Mr. McCullough tells us. McCullough Report at 3.

C. HP Retained Dr. Jacob Jacoby to Review The McCullough Survey.

McCullough's qualifications to conduct a survey rest on his practical experience as President and owner of Monroe Mendelsohn Research, Inc. *See* McCullough Report (Exhibit F within the Report). Mr. McCullough states that he has conducted a great many surveys in his career. McCullough Dep. at 57. Mr. McCullough has never published an academic paper, and he has never taught at a university. *Id.* at 61; McCullough Report (Exhibit F within the Report).

In order to review the McCullough Report, HP retained Dr. Jacob Jacoby, "a nationally recognized expert on consumer research." *Frisch's Restaurant, Inc. v. Elby's Big Boy of Steubenville, Inc.*, 661 F. Supp. 971, 985 (S.D. Ohio 1987). Dr. Jacoby has extensive academic qualifications, as well as extensive practical experience. Dr. Jacoby has been a Professor of Consumer Behavior and Retail Management at New York University's Stern School of Business since 1981. His CV discloses more than 170 academic publications. *See* Jacoby Rebuttal Report at 31. Jacoby has conducted hundreds or thousands of scholarly and commercial research surveys.

Dr. Jacoby reviewed the McCullough survey, and found that it is profoundly flawed, because:

1. It studied the wrong issue. Exhibit B at 4.
2. Its core question is inherently misleading. *Id.* at 5.
3. Mr. McCullough used questionable language in describing the Adaptive Lighting feature. *Id.* at 8.
4. The McCullough survey called for respondents to make guesses. *Id.* at 9.
5. And it called for respondents to make high guesses. *Id.* at 10.

### **ARGUMENT**

A damage award for patent infringement may not be “derived from speculative assumptions.” *Shockley v. Arcan, Inc.*, 248 F.3d 1349, 1363-64 (Fed. Cir. 2001). A damages expert must base his opinion “upon sufficient facts or data,” so that his work is “the product of reliable principles and methods,” and the expert must apply such methods and principles “reliably to the facts of the case.” Federal Rule of Evidence 702. The probative value of expert evidence may not be substantially outweighed by the danger of prejudice or of confusing the jury. Federal Rules of Evidence 403. As the Supreme Court has emphasized, the trial court has an essential “gatekeeping” function to “ensur[e] that an expert’s testimony both rests on a reliable foundation and is relevant to the task at hand.” *Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579, 597 (1993). *See also Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 141 (1999) (trial court’s gatekeeping function “applies . . . to testimony based on ‘technical’ and ‘other specialized’ knowledge”); *General Electric v. Joiner*, 522 U.S. 136, 146 (1997) (district courts may reject expert testimony when there is “too great an analytical gap between the data and the opinion proffered”).

#### **I. A SURVEY MUST MEET GENERALLY ACCEPTED STANDARDS OF OBJECTIVE RESEARCH.**

The *Daubert* requirements apply with full force where an expert offers evidence based on a survey. The survey must abide by “generally accepted survey principles.” *Brokerage*

*Concepts v. U.S. Healthcare*, 140 F.3d 494, 516 n.14 (3d Cir. 1998). *See also Citizens Financial Group, Inc. v. Citizens Nat. Bank of Evans City*, 383 F.3d 110, 121 (3d Cir. 2004) (upholding district court's decision to exclude expert's consumer survey). If a survey does not meet generally accepted standards, then "the danger of unfair prejudice far outweighs the minimum probative value of [the expert's] testimony." *Id.* at 120.

"[T]he evidentiary value of a survey depends on its underlying objectivity as determined through many factors, such as ' . . . whether the questions are directed to the real issues, and whether the questions are leading or suggestive.'" *Novartis Consumer Health, Inc. v. Johnson & Johnson-Merck Consumer Pharm. Co.*, 290 F.3d 578, 591 (3d Cir. 2002) (quoting *Johnson & Johnson-Merck Consumer Pharm. Co. v. Smithkline Beecham Corp.*, 960 F.2d 294, 300 (2d Cir. 1992)). In order to guide courts in this inquiry, the Federal Judicial Center has published a chapter titled "Reference Guide on Survey Research." *Reference Manual On Scientific Evidence* at 229 (2d ed. 2000). The guidelines stated by the Federal Judicial Center are generally accepted by the courts, as well as by the experts for both parties in this case. *See Tunnell v. Ford Motor Co.*, 330 F. Supp. 2d 707 (W.D. Va. 2004) (excluding survey that failed to follow *Reference Manual* guidelines); *Albert v. Warner-Lambert Co.*, 234 F. Supp. 2d 101 (D. Mass. 2002) (excluding survey offered to support a plaintiff's damages theory); *see also* McCullough Dep. at 125 ("Q: Is that an authoritative statement on standards for research surveys? A: As a basic guideline, yes."); Jacoby Rebuttal Report at 3-4.

To begin with, the survey must address an issue that is relevant in the case. *Novartis Consumer Health*, 290 F.3d at 591. If the survey does address a relevant issue, the court must go on to consider whether:

- the appropriate population was properly identified and selected;

**REDACTED**

- the sample chosen was representative of that appropriate population;
- the survey included only qualified respondents;
- the questions asked were clear, precise, unbiased and not leading;
- the survey provided filter questions to reduce guessing;
- the survey was conducted by qualified persons following proper interview procedures;
- the data gathered were accurately recorded;
- the data were classified consistently and accurately and analyzed in accordance with accepted statistical principles; and
- the process was conducted so as to ensure objectivity.

*Reference Manual, supra*, at 229-30 (emphasis added); *see also* Jacoby Rebuttal Report at 3. At his deposition, Mr. McCullough acknowledged that a survey should meet these standards. McCullough Dep. at 125. Indeed, Mr. McCullough submitted a report in another case advancing these same principles (detailing them further in a total of twenty-five numbered propositions). Report of Walter McCullough in *Levi Strauss & Co. v. RP55, Inc.*, No. C04-0468 (N.D. Cal. 2005) (Exhibit G) at 2.

## **II. THE McCULLOUGH SURVEY FAILS TO MEET GENERALLY ACCEPTED SURVEY PRINCIPLES.**

---

### **A. The Subject Addressed Is Not Relevant To Polaroid's Theory Of Damages.**

The first question that must be asked of any survey is whether it studies a relevant subject. *Novartis Consumer Health*, 290 F.3d at 591. *See Izumi Products Co. v. Koninklijke Philips Electronics N.V.*, C.A. No. 02-156-SLR (D. Del. Apr. 27, 2004) (precluding expert opinion; *Reference Manual, supra*, at 236-37; McCullough Dep. at 126 and Exhibit G at 2.

Mr.

McCullough's survey does not provide any evidence that would tend to support this theory. At his deposition, Mr. McCullough testified:

Q. Have you formed any opinion as to how often people who have the Hewlett-Packard printers use the adaptive lighting feature?

A. No.

Q. Do the results of your survey and for that matter the Jacoby survey give any basis to draw a conclusion as to that question?

A. No.

Q. Have you formed any opinion as to whether people who have an HP printer are likely to print more photos as a result of having the adaptive lighting feature?

A. I don't know that either way.

Q. And so I take it the results of your survey and, for that matter, the results of the Jacoby survey do not provide a basis to draw a conclusion on that question.

A: That's correct.

McCullough Dep. at 227-28 (emphasis added). Further:

Q. And so I take it the results of your survey don't provide a basis to state anything further to quantify that dollar benefit [to HP].

A. That's right.

Q. And I -- and likewise, the Jacoby survey that you've seen doesn't provide a basis to quantify that benefit?

A. That's also correct.

*Id.* at 229 (emphasis added).

The McCullough survey does not support the opinion of Polaroid's damages expert, and it is not relevant to Polaroid's theory of damages. It therefore fails the threshold test of F.R.Evid. 702(3). It is not applicable to the facts of this case. As a result, its probative value is non-

existent, and the risk that it will produce jury confusion and prejudice to HP is high. F.R.Evid. 403. For this reason alone, the McCullough survey should be stricken. *See Starter Corp. v. Converse, Inc.*, 170 F.3d 286 (2d Cir. 1999) (affirming district court's decision to exclude survey as irrelevant because it did not support plaintiff's legal position); *see also C.A. May Marine Supply Co. v. Brunswick Corp.*, 649 F.2d 1049 (5th Cir. 1981) (trial court properly excluded customer survey as irrelevant to damages theory).

B. The McCullough Survey Design Is Inherently Biased And Misleading.

Where the subject of a survey does have relevance to the case, the central considerations are whether the questions asked were clear, precise, unbiased and not leading -- in other words, whether the process was conducted so as to ensure objectivity. *See Reference Manual, supra*, at 237-38, 246, 248-49. *Accord Novartis Consumer Health*, 290 F.3d at 591; McCullough Dep. at 128, 133-34; Exhibit G at 2-3. At each of its principal steps, the design of Mr. McCullough's survey biased the results toward the result desired by Polaroid.

1. Mr. McCullough's interviewers handed each participant a written product description -- the fact sheet from HP -- for either the Photosmart C6180 All-in-One or the Officejet 5610 All-in-One. *See* McCullough Report at 6. The HP fact sheet listed more than twenty attributes of each copier/scanner/fax/printer. These attributes include, among many others:

- "Print and copy text in laser quality"
- "the world's fastest photo All-in-One"
- "fax fast, in color, with or without a PC"
- "Do superb scans of photos and documents and restore damaged photos"
- "Print documents fast"
- "Print rich, realistic photos"

- "Print on both sides of the page"

McCullough Report (Exhibit C within the Report) (emphasis added). Each of these attributes may have value to consumers. Yet "[t]he McCullough survey does not ask about any of these attributes . . . ." Jacoby Rebuttal Report at 5.

2. Instead, McCullough's interviewer read aloud a laudatory description of the Adaptive Lighting feature only. The McCullough survey did not read to respondents any description of any other feature of the All-in-One device. This procedure focused attention on the Adaptive Lighting feature, communicated to respondents that they should view it as valuable, and avoided any consideration of the value of this feature in comparison to other features. *See id.* at 7.

3. Mr. McCullough devised particularly complimentary language to describe the Adaptive Lighting feature of the printer component of the All-in-One. Participants heard the following:

This particular color ink jet contains a feature called "Adaptive Lighting Technology". Adaptive Lighting Technology is a breakthrough technology that enables printers to produce photos that look more like what people see with their own eyes. It accomplishes this by balancing relationships between bright and dark areas in a photo, preserving gentle contrasts by smoothing out harsh contrasts.

McCullough Report at 6. Mr. McCullough drafted this summary, taking bits and pieces of information from different websites to create his own colorful "composite." McCullough Dep. at 148. Mr. McCullough's description incorrectly suggests that Adaptive Lighting is used all the time. He did not provide HP's own description of the Adaptive Lighting feature, which accurately conveys that the feature has only limited use. *See* Jacoby Rebuttal Report at 7-8 (noting that HP describes this feature as being used only "For images with extreme light/shadow contrast or after using flash").



Hearing Mr. McCullough's laudatory description of Adaptive Lighting ("breakthrough technology," "enables," "what people see with their own eyes," "accomplishes," "preserving gentle contrasts by smoothing out harsh contrasts"), respondents were led to the view that the feature described to them must be valuable. *See id.*

4. After hearing this description of Adaptive Lighting, participants were then asked a series of questions about it. The survey asked:

If there were a color ink jet printer model that contained all of the features of the printer whose description I just showed you, but it did **not** have the Adaptive Lighting Technology feature, do you think that model would cost less than the model with the Adaptive Lighting Technology feature, or would the price be the same as the model with the Adaptive Lighting Technology feature?

McCullough Report at 6. And then:

About how much less do you think the model **without** the Adaptive Lighting Technology feature would cost?

*Id.* at 7.

Respondents were asked to state a dollar figure related to Adaptive Lighting alone. They were not asked to place this figure within any frame of reference related to the other attributes to the product. For example, respondents were not asked to allocate value among the All-in-One's copying, faxing, printing and scanning functions, and then to estimate the value of Adaptive Lighting as a part of the printing functionality. Mr. McCullough's single-focus methodology is inherently misleading. Dr. Jacoby explained:

Respondents were asked only about the Adaptive Lighting feature. They were not asked about any other features. In this way, without any frame of reference that would enable them to recognize that their guesses must be in error, respondents are able to provide preposterous answers. For example, in addition to printing photos, most all-in-one color ink-jet printers also serve the following functions: printing alphanumeric and graphic documents sent from computers to which they are attached, making copies, scanning

documents and sending and receiving FAXes. As I understand it, the Adaptive Lighting Technology in printing only comes into play in regard to printing photographs, and not all photographs at that. That being so, in order to provide a proper framework and reduce the extent of uninformed guesses, respondents should have first been asked about the value of each of these general functions before being asked about the value of a specific feature applicable to one or two of these functions.

Jacoby Rebuttal Report at 6-7 (emphasis added).

The biasing had another aspect as well. Many of the respondents received from Mr. McCullough a card providing potential responses. The scale of this card effectively communicated to respondents the values that Mr. McCullough expected. As Dr. Jacoby explains, “[a]ll questions communicate information to respondents.” *Id.* at 12. Mr. McCullough’s survey provided respondents with an answer scale of: “less than \$1.00”, “\$1.00-\$4.99”, “\$5.00-\$9.99”, “\$10.00-\$19.00” or “20.00 or more.” This scale communicated to respondents that Mr. McCullough did not expect answers measured in pennies -- although in fact the Adaptive Lighting feature may cost HP less than one cent per unit. As Dr. Jacoby noted, the survey could have given choices of: “less than \$0.05”, “\$0.05 to \$0.09”, “\$0.10 to \$0.19”, “0.20 to \$0.49”, “0.50 to \$0.99”, “\$1.00-\$4.99”, “5.00-\$9.99”, “10.00-\$19.00” or “\$20.00 or more”. If that alternative survey scale had been provided, it “would have obtained dramatically different results.” *Id.* at 13. A survey is improper if only a closed set of potential answers is provided, and if those potential answers fail to offer the full range of plausible alternatives. *See, e.g., American Home Products v. Johnson & Johnson*, 654 F. Supp. 568, 581 (S.D.N.Y. 1987).

In context, McCullough’s questions were leading. They biased responses in the direction desired by Polaroid. *Compare Reference Manual, supra.* Mr. McCullough’s framework was “inherently misleading” because “it draw[s] attention to one feature and not the other features,” and “does so in a manner that makes it seem so much more important and desirable than the

other features.” Jacoby Rebuttal Report at 7. Mr. McCullough’s process was not conducted so as to ensure objectivity. *Reference Manual, supra*. Consequently, the McCullough survey has no probative value and should be stricken. *See Brokerage Concepts*, 140 F.3d at 516 n.14; *Johnson & Johnson-Merck Consumer Pharm. Co. v. Rhone-Poulenc Rorer Pharms., Inc.*, 19 F.3d 125, 134-35 (3d Cir. 1994) (affirming district court’s decision to ignore survey results that “suffered from . . . leading questions”); *Tunnell*, 330 F. Supp. 2d at 711 (striking survey because it was “unfairly skewed in favor of Plaintiff,” and cross-examination “will not provide the answers that survey respondents would have given had the questions not been worded in a manner that was biased”).

Prior surveys conducted by Mr. McCullough have been criticized by other courts for similar reasons. For example, in a previous case where Dr. Jacoby reviewed a survey by Mr. McCullough, the Court excluded Mr. McCullough’s testimony because his survey design did not replicate the real-life scenario faced by the consumer. *See Hill’s Pet Nutrition, Inc. v. Nutro Products, Inc.*, 258 F. Supp. 2d 1197, 1203, 1210 (D. Kan. 2003).

C. The McCullough Survey Called for Guesses.

Aside from the central concern for objectivity, a survey must also meet the other generally accepted survey principles. Among these, naturally, the survey must ask a question that the respondents are qualified to answer. *See Reference Manual, supra*, at 239-40, 247-48; McCullough Dep. at 129-30, 134 and Exhibit G at 2; *see also Home Box Office v. Showtime/The Movie Channel*, 665 F. Supp. 1079, 1083-84 (S.D.N.Y. 1987) (persons in trade, not average consumers, were correct sample for survey assessing trade reactions to advertisement), *aff’d in part, vacated in part* by 832 F.2d 1311 (2d Cir. 1987). Mr. McCullough’s survey failed this fundamental requirement as well.

McCullough's survey respondents were not chosen based on any experience or skill in valuing individual printer features or related technology. McCullough admitted this at his deposition. *See* McCullough Dep. at 113. The valuations reported in McCullough's survey are simply uninformed guesses provided by randomly selected retail shoppers. Jacoby Rebuttal Report at 9. Mr. McCullough could have asked participants "How much are you willing to pay for such a feature?", and in that event it is conceivable the range of answers might have provided some credible information. But Mr. McCullough chose not to ask this logical question. *See* Jacoby Rebuttal Report at 4. Instead Mr. McCullough asked respondents "About how much less do you think the model without the Adaptive Lighting feature would cost?", and this question asked them to guess at HP's costs or pricing strategy. Uninformed guesses cannot serve as a credible basis for a valid survey. As Dr. Jacoby noted, "[a]t the very least, [the main question] should have been preceded by a filter question asking respondents if they were, or felt they were, qualified or capable of making such estimates, then asked only of those who answered 'yes' to the filter question." *Id.* at 10. *See also Johnson & Johnson-Merck*, 19 F.3d at 134-35 (affirming district court's decision to ignore survey, since the survey "suffered from repetitive and leading questions and no filter mechanism").

Carrying on further with this error, Mr. McCullough discouraged respondents from saying that they did not know the answer to the critical question in the survey -- and encouraged his respondents to make guesses even where they acknowledged that they didn't know the answer. As Dr. Jacoby explained:

Question 1 asks: "do you think that model would cost less than the model with the Adaptive Lighting Technology feature, or would the price be the same as the model with the Adaptive Lighting Technology feature?"

...

Those who answered “would cost less” were asked Question 2: “About how much less do you think the model without the Adaptive Lighting feature would cost”

...

[T]hose who answered “don’t know” to Question 2 were handed a card (described below) and asked Question 3: “Which of the choices on this card indicates how much less you think the model without the Adaptive Lighting Technology feature would cost. Just tell me the letter of the choice you select.” This procedure led to wild guesses.

Jacoby Rebuttal Report at 11 (emphasis added).<sup>4</sup>

Without an understanding of how often Adaptive Lighting is used and what it does, Mr. McCullough’s respondents offered a sprawling range of guesses. The McCullough survey responses ranged from zero to \$250 (asked about an All-in-One priced at \$300) -- and ranged from zero to \$200 (asked about an All-in-One priced at \$100). McCullough Report (Exhibit E within the Report).

The first group of consumers guessed, on average, that the All-in-One that included this feature would cost \$50 more than an All-in-One that lacked this feature. The second group of consumers guessed, on average, that the All-in-One with this same feature would cost \$20 more than an All-in-One without this feature. The wide range of their answers (and the different answers provided for the same feature in two different devices) demonstrate that the participants’ answers have no meaningful foundation. The design of the survey did not draw on any actual knowledge or experience of the respondents. It asked them to guess -- and it led them to supply high guesses, rather than low guesses. For these additional reasons, the McCullough survey should be stricken. *See Novartis Consumer Health*, 290 F.3d at 591 (“A survey is not credible if

---

<sup>4</sup>Answers recorded in the survey demonstrate that respondents were, in fact, just guessing. One verbatim response stated that the respondent was “taking a stab at the dark.” McCullough Dep. at 170.

it relies on leading questions which . . . invite guessing”); *AstraZeneca LP v. TAP Pharm. Prods.*, 444 F. Supp. 2d 278, 292-93 (D. Del. 2006) (excluding survey, in part, because “data generated by the [closed-ended] question suggest that respondents were tending to guess when they chose an answer”).

Moreover, both sets of guesses supplied to Mr. McCullough lead to preposterous results. Upon analyzing the responses from McCullough’s survey, Dr. Jacoby concluded that “[t]he dollar values reported by many respondents have little to no ‘face validity’ – they are not reasonable.” Jacoby Rebuttal at 17. As Dr. Jacoby explains:

More than half of the respondents who evaluated the HP Photosmart C6180 (approximately 55%) guessed that the Adaptive Lighting feature was worth at least \$50; more than 20% guessed it was worth at least \$100. Yet the printer with all its features costs \$299.99. Given everything else this printer does, it is facially unreasonable for anyone to think that this one feature would be worth one-sixth to more than one-third of the printer’s entire value.

*Id.* This observation has even greater force with respect to the HP Officejet 5610, which sells for just \$99.99. *Id.* at 18. It is preposterous that a respondent said this printer would sell for \$200 less without the Adaptive Lighting feature -- and also preposterous are the answers of \$100, \$80, \$50 and \$20. *See* McCullough Report (Exhibit E within the Report).

Where a survey generates preposterous results, it does not have “circumstantial guarantees of trustworthiness” (*Brokerage Concepts, supra*), and hence it is inadmissible.

### CONCLUSION

For all of the reasons set forth above, Mr. McCullough’s survey does not conform to generally accepted survey standards. Therefore it does not meet the requirements under the Federal Rules of Evidence for the admissibility of reliable expert evidence. HP respectfully requests that the Court exclude any evidence pertaining to Mr. McCullough’s consumer survey, and preclude Mr. McCullough from testifying at trial.

Dated: May 23, 2008

FISH & RICHARDSON P.C.

By: /s/ William J. Marsden, Jr.

William J. Marsden, Jr. (#2247)  
Raymond N. Scott, Jr. (#4949)  
919 N. Market Street, Suite 1100  
Wilmington, DE 19801  
Telephone: (302) 652-5070  
Facsimile: (302) 652-0607  
Email: [marsden@fr.com](mailto:marsden@fr.com)  
[rscott@fr.com](mailto:rscott@fr.com)

MINTZ COHN FERRIS GLOVSKY & POPEO, P.C.

John E. Giust  
Matthew C. Bernstein  
5355 Mira Sorrento Place, Suite 600  
San Diego, CA 92121-3039  
Telephone: 858-320-3000  
Facsimile: 858-320-3001  
Email: [JGiust@mintz.com](mailto:JGiust@mintz.com)  
[MBernstein@mintz.com](mailto:MBernstein@mintz.com)

CHOATE HALL & STEWART, LLP

Robert S. Frank, Jr.  
Robert M. Buchanan, Jr.  
Carlos Perez-Albuerne  
Elizabeth A. Castellani  
Two International Place  
Boston, MA 02110  
Telephone: (617) 248-5000  
Facsimile: (617) 248-4000  
Email: [rfrank@choate.com](mailto:rfrank@choate.com)  
[bbuchanan@choate.com](mailto:bbuchanan@choate.com)  
[cperez@choate.com](mailto:cperez@choate.com)  
[ecastellani@choate.com](mailto:ecastellani@choate.com)

*Attorneys for Defendant and Counterclaim-Plaintiff  
Hewlett-Packard Company*

**CERTIFICATE OF SERVICE**

I hereby certify that on May 23, 2008, I electronically filed with the Clerk of Court the foregoing document using CM/ECF which will send electronic notification of such filing(s) to the following counsel:

**Via Email**

Jack B. Blumenfeld (#1014)  
Julia Heaney (#3052)  
Morris, Nichols, Arsht & Tunnell, LLP  
1201 North Market Street  
Wilmington, DE 19899-1347  
Phone: 302-658-9200  
Fax: 302-658-3989  
Emails: [jblumenfeld@mnat.com](mailto:jblumenfeld@mnat.com); [jheaney@mnat.com](mailto:jheaney@mnat.com)

Attorneys for Plaintiff and  
Counterclaim-Defendant  
Polaroid Corporation

**Via Email**

Russell E. Levine, P.C.  
Michelle W. Skinner/David W. Higer  
Maria A. Meginnnes/Courtney Holohan/C. Beasley  
Kirkland & Ellis LLP  
200 East Randolph Drive  
Chicago, IL 60601  
Phone: 312-861-2000  
Fax: 312-861-2200  
Emails: [rlevine@kirkland.com](mailto:rlevine@kirkland.com); [ggerst@kirkland.com](mailto:ggerst@kirkland.com);  
[miskinner@kirkland.com](mailto:miskinner@kirkland.com); [dhiger@kirkland.com](mailto:dhiger@kirkland.com);  
[mmeginnnes@kirkland.com](mailto:mmeginnnes@kirkland.com); [mmeginnnes@kirkland.com](mailto:mmeginnnes@kirkland.com);  
[cbeasley@kirkland.com](mailto:cbeasley@kirkland.com)

Attorneys for Plaintiff and  
Counterclaim-Defendant  
Polaroid Corporation

**Courtesy Copy Via Federal Express**

Michelle W. Skinner  
Kirkland & Ellis LLP  
200 East Randolph Drive  
Chicago, IL 60601  
Phone: 312-861-2000  
Fax: 312-861-2200

/s/ William J. Marsden, Jr.

William J. Marsden, Jr.